

REMARKS

The Examiner is thanked for the thorough examination and search of the subject patent application.

Claims 26-52 are pending, wherein Claims 26-52 are currently amended, and Claims 1-25 are canceled.

Applicants respectfully traverse the rejections for at least the reasons set forth below.

Response to Claim Rejections under 35 U.S.C. 112

Reconsideration of Claims 32, 43 and 52 rejected under 35 U.S.C. 112, second paragraph, is requested in accordance with the following remarks.

Withdrawal of rejection under 35 U.S.C. 112, second paragraph, to Claims 32, 43 and 52 is respectfully requested as Claims 32, 43 and 52 are currently amended.

Response to Claim Rejections under 35 U.S.C. 102 and 103

Response to Claims 26-32

As currently amended, independent claim 26 is recited below:

26. A chip package comprising:

a semiconductor chip having a bottom surface with a mark used to be read by a code reader; and

a first bump on said bottom surface.

Section I

Reconsideration of Claims 26-32 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,984,190 to Nevill is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 26 patentably distinguishes over the citation by Nevill (US5,984,190).

Nevill teaches a semiconductor chip 10 has a surface with a mark 14 used to be read by a code reader. ~ See Fig. 1 ~ However, Nevill fails to teach or suggest that a bump may be on said surface with said mark 14, as claimed in claim 26. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 26 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 26 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 27-32 patently define over the prior art as well.

Section II

Reconsideration of Claims 26 and 28-32 rejected under 35 U.S.C. 103(a) as being unpatentable over JP362,169,448 to Hiromasa et al. in view of US5,984,190 to Nevill is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 26 patentably distinguishes over the citation by Hiromasa et al. (JP362,169,448) and Nevill (US5,984,190).

Hiromasa et al. teach a mark is on a package 2, but fail to teach, hint or suggest that a semiconductor chip may have a mark used to be read by a code reader, as claimed in claim 26. ~ *See Figs. 1-5 and abstract* ~ Furthermore, Hiromasa et al. fail to teach hint or suggest that the mark is used to be read by a code reader, as claimed in claim 26.

Even under the combination of the citations by Hiromasa et al. and Nevill, it is believed that both Hiromasa et al. and Nevill fail to teach a bump may be on a surface of a semiconductor chip, with a mark used to be read by a code reader, as claimed in claim 26. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 26 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 26 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 27-32 patentably define over the prior art as well.

Section III

Reconsideration of Claims 26, 27 and 30-32 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,539,976 to Miyauchi et al. and of Claims 28-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyauchi et al. in view of JP05267482 to Sono et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 26 patentably distinguishes over the citation by Miyauchi et al. (US5,539,976).

Miyauchi et al. teach a mark used to be read by a code reader is on a package, but fail to teach, hint or suggest that a semiconductor chip may have a mark used to be read by a code reader, as claimed in claim 26. ~ See Fig. 3 ~ Furthermore, Miyauchi et al. fail to teach, hint or suggest that a bump may be on a surface of a semiconductor chip, with a mark used to be read by a code reader, as claimed in claim 26. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 26 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 26 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 27-32 patentably define over the prior art as well.

Section IV

Reconsideration of Claims 26-32 rejected under 35 U.S.C. 103(a) as being unpatentable over JP05267482 to Sono et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 26 patentably distinguishes over the citation by Sono et al. (JP05267482).

Sono et al. teach a mark used to be read by a code reader is on a package, but fail to teach, hint or suggest that a semiconductor chip may have a mark used to be read by a code reader, as claimed in claim 26. ~ See Fig. 1 ~ Furthermore, Sono et al. fail to teach, hint or suggest that a bump may be on a surface of a semiconductor chip, with a mark used to be read by a code reader, as claimed in claim 26. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 26 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 26 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 27-32 patentably define over the prior art as well.

Response to Claims 33-37

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As currently amended, independent claim 33 is recited below:

33. A semiconductor chip having a top surface with a mark used to be read by a code reader and a bottom surface with multiple pads.

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Section I

Reconsideration of Claims 33-37 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,984,190 to Nevill is requested in accordance with the following remarks.

Applicants respectfully assert that the semiconductor chip claimed in amended claim 33 patentably distinguishes over the citation by Nevill (US5,984,190).

Nevill teaches a semiconductor chip 10 has a surface with a mark 14 used to be read by a code reader. ~ See Fig. 1 ~ However, Nevill fails to teach or suggest that the semiconductor chip 10 may have a top surface with a mark used to be read by a code reader and a bottom surface with multiple pads, as claimed in claim 33. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 33 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 33 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 34-37 patentably define over the prior art as well.

Section II

Reconsideration of Claims 33-37 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,539,976 to Miyauchi et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the semiconductor chip claimed in amended claim 33 patentably distinguishes over the citation by Miyauchi et al. (US5,539,976).

Miyauchi et al. teach a mark used to be read by a code reader is on a package, but fail to teach, hint or suggest that a semiconductor chip may have a mark used to be read by a code reader, as claimed in claim 26. ~ See Fig. 3 ~ Furthermore, Miyauchi et al. fail to teach, hint or suggest that a semiconductor chip may have a top surface with a mark used to be read by a code reader and a bottom surface with multiple pads, as claimed in claim 33. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 33 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 33 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 34-37 patently define over the prior art as well.

Section III

Reconsideration of Claims 33-37 rejected under 35 U.S.C. 103(a) as being unpatentable over JP05267482 to Sono et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 33 patentably distinguishes over the citation by Sono et al. (JP05267482).

Sono et al. teach a mark used to be read by a code reader is on a package, but fail to teach, hint or suggest that a semiconductor chip may have a mark used to be read by a code reader, as claimed in claim 26. ~ See Fig. 1 ~ Furthermore, Sono et al. fail to teach, hint or suggest that a semiconductor chip may have a top surface with a mark used to be read by a code reader and a

bottom surface with multiple pads, as claimed in claim 33. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 33 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 33 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 34-37 patently define over the prior art as well.

Response to Claims 38-43

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As currently amended, independent claim 38 is recited below:

38. A chip package comprising:
a substrate;
a semiconductor chip over said substrate;
a wirebonded wire connecting said semiconductor chip and said substrate; and
a protecting structure over said semiconductor chip and said substrate, and
enclosing said wirebonded wire, wherein said semiconductor chip is visible through said protecting structure.

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Section I

Reconsideration of Claims 38-43 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,984,190 to Nevill is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 38 patentably distinguishes over the citation by Nevill (US5,984,190).

Nevill fails to teach how to package a semiconductor chip 10. It is believed that the feature that “a protecting structure over a semiconductor chip and a substrate, and enclosing a wirebonded wire may have the semiconductor chip visible therethrough” is not taught or suggested by Nevill. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 38 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 38 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 39-43 patently define over the prior art as well.

Section II

Reconsideration of Claims 38-43 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,539,976 to Miyauchi et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 38 patentably distinguishes over the citation by Miyauchi et al. (US5,539,976).

Miyauchi et al. fails to teach how to package a semiconductor chip. It is believed that the feature that “a protecting structure over a semiconductor chip and a substrate, and enclosing a wirebonded wire wherein the semiconductor chip is visible therethrough” is not taught or suggested by Miyauchi et al. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 38 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 38 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 39-43 patently define over the prior art as well.

Section III

Reconsideration of Claims 38-43 rejected under 35 U.S.C. 103(a) as being unpatentable over JP05267482 to Sono et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 38 patentably distinguishes over the citation by Sono et al. (JP05267482).

Sono et al. fails to teach how to package a semiconductor chip. It is believed that the feature that “a protecting structure over a semiconductor chip and a substrate, and enclosing a wirebonded wire wherein the semiconductor chip is visible therethrough” is not taught or suggested by Sono et al. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 38 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 38 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 39-43 patently define over the prior art as well.

Response to Claims 44-49

As currently amended, independent claim 44 is recited below:

44. A chip package comprising:
a substrate;
a semiconductor chip over said substrate;
multiple bumps between said semiconductor chip and said substrate; and
a protecting structure over said semiconductor chip and said substrate, wherein
said semiconductor chip is visible through said protecting structure.
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Section I

Reconsideration of Claims 44-45 and 47-49 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,984,190 to Nevill and of Claim 46 rejected under 35 U.S.C. 103(a) as being unpatentable over Nevill in view of US5,539,976 to Miyauchi et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 44 patentably distinguishes over the citation by Nevill (US5,984,190).

Nevill fails to teach how to package a semiconductor chip 10. It is believed that the feature that “a protecting structure over a structure with a semiconductor chip and a substrate connected through multiple bumps wherein the semiconductor chip is visible therethrough” is not taught or suggested by Nevill. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 44 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 44 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 45-49 patently define over the prior art as well.

Section II

Reconsideration of Claims 44 and 46-48 rejected under 35 U.S.C. 103(a) as being unpatentable over JP362,169,448 to Hiromasa et al. in view of US5,984,190 to Nevill is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 44 patentably distinguishes over the citation by Hiromasa et al. (JP362,169,448) and Nevill (US5,984,190).

Hiromasa et al. teach a chip package comprises a substrate 20; a semiconductor chip 12 over said substrate 20; and a protecting structure 18 over said semiconductor chip 12 and said substrate 20. ~ See Fig. 3 ~ However, Hiromasa et al. fail to teach, hint or suggest that said semiconductor chip 12 is visible through said protecting structure 18, as claimed in claim 44. Furthermore, Hiromasa et al. fail to teach, hint or suggest that the chip package comprises multiple bumps between said semiconductor chip 12 and said substrate 20, as claimed in claim 44. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 44 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 44 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 45-49 patentably define over the prior art as well.

Section III

Reconsideration of Claims 44-48 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,539,976 to Miyauchi et al. and of Claim 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyauchi et al. in view of US6,478,223 to Ackley et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 44 patentably distinguishes over the citation by Miyauchi et al. (US5,539,976).

Miyauchi et al. fail to teach how to package a semiconductor chip. It is believed that the feature that “a protecting structure over a structure with a semiconductor chip and a substrate connected through multiple bumps wherein the semiconductor chip is visible therethrough” is not taught or suggested by Miyauchi et al. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 44 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 44 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 45-49 patentably define over the prior art as well.

Section IV

Reconsideration of Claims 44-48 rejected under 35 U.S.C. 103(a) as being unpatentable over JP05267482 to Sono et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the chip package claimed in amended claim 44 patentably distinguishes over the citation by Sono et al. (JP05267482).

Sono et al. fail to teach how to package a semiconductor chip. It is believed that the feature that “a protecting structure over a structure with a semiconductor chip and a substrate connected through multiple bumps wherein the semiconductor chip is visible therethrough” is not taught or suggested by Sono et al. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 44 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 44 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 45-49 patentably define over the prior art as well.

Response to Claims 50-52

As currently amended, independent claim 50 is recited below:

50. A device comprising:

 a semiconductor chip having a top surface having a first region with a mark and a second region without said mark; and

a protecting structure over said mark and said second region, wherein said mark is visible through said protecting structure.

Section I

Reconsideration of Claims 50-52 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,984,190 to Nevill is requested in accordance with the following remarks.

Applicants respectfully assert that the device claimed in amended claim 50 patentably distinguishes over the citation by Nevill (US5,984,190).

Nevill teaches a device comprising a semiconductor chip 10 having a top surface having a first region with a mark 14 and a second region without said mark 14, but fails to teach or suggest the device may comprise a protecting structure over said mark 14 and said second region, wherein said mark 14 is visible through said protecting structure, as claimed in claim 52. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 50 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 50 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 51 and 52 patentably define over the prior art as well.

Section II

Reconsideration of Claims 50-52 rejected under 35 U.S.C. 102(b) as being anticipated by JP362,169,448 to Hiromasa et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the device claimed in amended claim 50 patentably distinguishes over the citation by Hiromasa et al. (JP362,169,448).

Hiromasa et al. teach a device comprises a semiconductor chip 12 having a top surface having a first region with a mark 14 and a second region without said mark 14, and a protecting structure 18 over said mark 14 and said second region. However, Hiromasa et al. fail to teach, hint or suggest that said mark 14 is visible through said protecting structure 18, as claimed in claim 50. Withdrawal of rejection under 35 U.S.C. 102 (b) to Claim 50 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 50 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 51 and 52 patentably define over the prior art as well.

Section III

Reconsideration of Claims 50-52 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,539,976 to Miyauchi et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the device claimed in amended claim 50 patentably distinguishes over the citation by Miyauchi et al. (US5,539,976).

Miyauchi et al. teach a mark is on a protecting structure, but fail to teach a semiconductor chip may have a mark under a protecting structure, as claimed in claim 50. Furthermore,

Miyauchi et al. fail to teach, hint or suggest the feature that “a mark of a semiconductor chip is visible through a protecting structure that is over said mark and over a region of the semiconductor chip not covered by said mark,” as claimed in claim 50. Withdrawal of rejection under 35 U.S.C. 103 (a) to Claim 50 is respectfully requested.

For at least the foregoing reasons, applicant respectfully submits independent claim 50 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 51 and 52 patentably define over the prior art as well.

Section IV

Reconsideration of Claims 50-52 rejected under 35 U.S.C. 102(b) as being anticipated by JP05267482 to Sono et al. is requested in accordance with the following remarks.

Applicants respectfully assert that the device claimed in amended claim 50 patentably distinguishes over the citation by Sono et al. (JP05267482).

Sono et al. teach a mark is on a protecting structure, but fail to teach a semiconductor chip may have a mark under a protecting structure, as claimed in claim 50. Furthermore, Sono et al. fail to teach, hint or suggest the feature that “a mark of a semiconductor chip is visible through a protecting structure that is over said mark and over a region of the semiconductor chip not covered by said mark”, as claimed in claim 50. Withdrawal of rejection under 35 U.S.C. 102 (b) to Claim 50 is respectfully requested.


For at least the foregoing reasons, applicant respectfully submits independent claim 50 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 51 and 52 patently define over the prior art as well.

CONCLUSION

Some or all of the pending claims are believed to be in condition for allowance. Accordingly, allowance of the claims and the application as a whole are respectfully requested.

It is requested that should Examiner Walsh not find that the Claims are now Allowable that he call the undersigned at 845 452-5863 to overcome any problems preventing allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'S. Ackerman', with a long horizontal stroke extending to the right.

Stephen B. Ackerman, Reg. No. 37,761